ABSTRACT OF THE DISCLOSURE

A computer system and its method of cooling are provided. A vapor chamber serves as a heat spreader for heat from the microelectronic die. A thermoelectric module serves to cool the vapor chamber and maintain proper functioning of the vapor chamber, thus keeping the microelectronic die cooled. A controller receives input from five temperature sensors, and utilizes the input to control current to the thermoelectric module and voltage/current to a motor that drives a fan and provides additional cooling. A current sensor allows the controller to monitor and limit power provided to the thermoelectric module.